

Gifted Students with Disabilities

Abstract

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Students who have both special abilities and disabilities are often recognised only for their disabling condition. Interventions tend to focus solely on the disability to the detriment of a student's special gifts. Gifted students need to have their special abilities celebrated and nurtured, regardless of any disability. This article recognises the difficulties of diagnosing giftedness when a disability co-exists and suggests ways to remedy this. The barriers faced by gifted students with disabilities are also discussed, with suggestions to minimise the effects of a disabling condition. Teaching a gifted student with a disability requires an in-depth understanding of the impact of the disability and ways of extending the student to maximise their strengths. This article includes a general overview of gifted students with disabilities and some specific areas of disability are discussed.

Introduction

Giftedness is often overlooked in students with disabilities. The difficulties associated with their disability makes identification unlikely. Gifted students with disabilities need to have their special abilities acknowledged and specifically catered for. Although interventions may be necessary to reduce the effect of disability, focus should be placed on enhancing their strengths and enabling participation. Each student will have individual needs and should have a programme considered on the basis of their own abilities and disabilities.

The Ministry of Education (2000) outlines a philosophy that is inclusive of gifted students with disabilities.

- The "hidden gifted" (which includes gifted students who have disabilities or learning difficulties) should be identified and adequately catered for.
- The learning environment should be responsive and provide stimulating learning experiences, which challenge gifted and talented students, enabling their special abilities to "surface" and be identified.
- Identification should involve a team approach and include a wide range of quantitative and qualitative methods.

Gifted students who have a disability do not need to be restricted in their achievements. Ludwig van Beethoven, Franklin D Roosevelt, Helen Keller, Vincent van Gogh, Albert Einstein, George Patton, Thomas Edison, Hans Christian Anderson, George Washington, and Nelson Rockefeller all had disabilities yet achieved greatness.

With the exception of students with intellectual disabilities, there are as many gifted among disabled students as any other segment of the population. The terms "gifted" and "disabled" are often viewed as placing students on opposite ends of the intelligence continuum (Gallagher & Gallagher, 1994). Students who have both special abilities and disabilities are often only identified as disabled. Viewing any student as having a "deficit" can lead to an expectation of low achievement, removing the need to provide successful learning outcomes. Special gifts also need identification, recognition and nurturing.

Difficulties in identifying giftedness

Identification methods need to consider both a student's potential and the current limitations placed on them by the degree of disability.

Karnes & Johnson (1991) discuss possible barriers to identification:

- The use of assessment procedures designed for students without disabilities.
- Students with disabilities may not display obvious signs of giftedness when compared with nondisabled peers.
- Students may be regarded as "slow" because of their disability, thus precluding any recognition of giftedness.
- Students may have strengths in some areas and deficits in others. Gaps in their skills may mask their talents.
- Professionals supporting students with disabilities may have little knowledge about the characteristics of gifted students.
- Professionals in gifted education may have little knowledge about students with disabilities.
- Active discouragement of students with disabilities from pursuing higher education and professional careers, steering them towards vocational training.

Identification requirements

A major obstacle confronting gifted students with disabilities is having their special abilities recognised (Karnes & Johnson, 1991).

- Identification requires input from parents and teachers.
- Identification should be examined in a full range of areas, including intellectual, academic, creativity, leadership, visual and performing arts, and psychomotor abilities.
- Comparisons need to be made alongside peers with similar disabilities, not within the norms of students without disabilities.

- To enable gifted students with disabilities to be identified, regular assessment methods will need to be modified.

Gifted students with disabilities require:

- adults who believe in them
- teachers who have high expectations and show confidence in their ability to succeed
- an environment that facilitates achievement

The training of professionals is essential. Standard techniques for teaching gifted students may need significant adaptations for students with disabilities.

Instead of categorising a student as "disabled" with special abilities, they should be regarded as "gifted" first and programmes developed accordingly (Davis & Rimm, 1998).

Programmes can include the same strategies used with students without disabilities to develop each student's strengths. This may include acceleration, enrichment, and grouping techniques.

Technological aids are available to overcome many difficulties. Computers, hearing aids, sign language, magnifiers, tape recorders, visual aids, etc. can enable a student to have better access to the learning environment.

Strategies to assist gifted students with disabilities

Strategies must also be implemented to ensure disability does not prevent a student developing their talent. Programmes can be designed to enhance a student's self image and develop social interactions. Activities should be directed at helping students achieve and appreciate the value of their success.

Students with disabilities may need social skills training while non-disabled peers may benefit from disability awareness to enable them to empathise and accept a student with a disability. Davis & Rimm (1998) suggest strategies to achieve this. For instance:

- Group discussions encourage open communication.
- Mixed learning teams with group outcomes can foster cooperation and interdependence.
- A gifted student with disabilities may benefit from receiving or being a peer tutor.
- Pairing gifted students with disabilities with talented adults who also have similar disabilities can provide both role modeling and inspiration (Braun, 1990).

Students may fall within more than one domain of disability, for instance having a sensory and physical impairment. Two students with the same disability may have similar difficulties or require completely different adaptations. A specific programme is best achieved through a collaborative approach with parents and professionals working together.

Conclusion

Students with disabilities are often overlooked in assessments to identify gifted students. Assessment techniques designed for regular students may not allow the gifts possessed by students with disabilities to "shine" alongside their non-disabled peers. Assessment procedures need to be adapted specifically for students with disabilities. Teaching methods must focus on enhancing each student's strengths while making adaptations to minimise the effects of disability. Gifted students need to have their special abilities nurtured and the opportunity to succeed, regardless of disability.

Physical disabilities

There are an extensive range of physical disabilities that can affect a student's performance. These can include anything from fine motor difficulties to quadriplegia. Identification and programming for gifted students with physical disabilities needs to be specifically tailored to meet their individual needs.

There are often obstacles to overcome to enable identification of giftedness when a physical disability is present. Cline & Schwartz (1999) suggest students may have:

- an inability to give a verbal response
- limited mobility
- a lack of fine motor coordination
- limited life experiences due to impaired mobility

Assessment techniques for students with a physical disability must take the degree of disability into account or find alternative methods of assessment.

Designing a programme for gifted students with a physical disability will need to incorporate ways to overcome the obstacles confronting a student. Assistive equipment such as pencil grips, special scissors, computers, communication boards, and voice synthesisers can help students with a disability participate in activities that would otherwise be difficult or impossible for them to complete (Ministry of Education, 2000).

A full assessment of the learning environment will be an essential part of any programme development. Environmental adaptations may be necessary to enable a child to participate (Foreman, 2000). This may include providing wheel chair access, modifying equipment, and altering the class layout. Teachers need to provide a programme that extends and strengthens the abilities of all gifted students, including those with disabilities.

Case story

Rose

Rose has cerebral palsy. This affects her fine motor skills and language. Rose has difficulty with tasks such as managing buttons, manipulating round door handles, and writing. Her speech is slightly slurred. This gives the impression that Rose may be "slow". At school Rose

was not able to complete written work satisfactorily. Reading out loud took longer for Rose than other students. She struggled to keep up with her work in a class of slow learners and left school at aged 15 years. Rose is now in her thirties and is beginning tertiary study. She uses a computer, which enables her to complete work quickly and to an acceptable standard. Rose received a C+ for her first assignment and was thrilled. This was the first success Rose had experienced during her education. A C+ is an exceptional mark for someone who was denied a regular education.

Students with physical disabilities need the same opportunities as their non-disabled peers. Where performance is limited by the effect of a disabling condition, every effort must be made to find alternative methods of instruction and assessment. Unless gifted students are supported to develop their potential, their talents may be buried by the weight of their disability.

Sensory disabilities

Students with visual and hearing impairments may have a slight disability or a significant loss. The degree of disability will determine the effect on each student and the effectiveness of adaptive equipment. Identification of giftedness can be achieved through observation and comparisons with similar peers. Students who are gifted and have a sensory impairment will require teachers to adapt their curriculum and teaching methods. Cline & Schwartz (1999) suggest programmes need to include:

- critical thinking
- creative thought processes
- social and emotional content

Hearing impairments

Students with a hearing impairment are not easily identified as gifted. Students unable to use verbal communication may reveal giftedness through their ability to communicate by alternative methods (Whitmore, 1981). This may include visual modes or nonverbal (including body language and/or gestures).

Giftedness may become apparent through:

- superior memory
- superior problem solving skills
- an exceptional interest and knowledge in specific areas

Gifted students with a hearing impairment require a programme that accommodates both their talents and their disability. The "expanded core curriculum" is required to teach everyday living skills. Students also require extension in their area of interest or talent.

Students will require additional support in the classroom. Although hearing aids enable a student to benefit from any residual hearing, they do not enable a student to hear normally. A student may hear some sounds and not others, usually incomplete or distorted words. Reading can be difficult for students with severe hearing loss and their reading ability may be depressed. Reading is usually learned by hearing the words and recognising sound blends. Information may need to be provided in an alternative manner, using charts, posters, signed videos, etc. If necessary, use an interpreter until the class and teacher are conversant with any signing methods used.

The [Deaf Association of New Zealand](#) suggests the following methods to reduce the effect of a hearing impairment:

- Face the person and ensure you have their attention.
- Keep your lips and face clear of obstruction. People sometimes put their hand to their face while talking or even turn their face away in response to a distraction.
- Stand in good light, having light behind you may mean your face is in shadow and difficult to read.
- Consider the degree of background noise. Hearing aids pick up all background noise and students may have difficulty filtering sounds.
- Start a conversation by identifying the topic first. This will give clues to help a student fill in any gaps they do not hear or see.
- Speak clearly, not loudly. Shouting distorts the lips and makes lip reading difficult.
- People who speak quickly may need to slow their speech a little. If a student does not understand, rephrase rather than repeat.
- Use simple, clear gestures and point or indicate objects being discussed.

The Deaf Association of New Zealand estimates there are 450,000 people in New Zealand affected by hearing impairment. How many of these are likely to be identified as gifted?

Visual impairments

Indicators of giftedness in students with visual impairments are similarly masked by their disability. Developmental delays, lack of opportunity, communication difficulties, learning two curricula (both mainstream and the "expanded core curriculum" to teach life skills) all contribute to a difficulty identifying giftedness. Assessment procedures need to consider these elements (Cline & Schwartz, 1999).

Assistive equipment is available to provide better access to the learning environment. Teachers will need to plan ahead and prepare suitable resources. Victoria University (2002) makes the following suggestions. Class materials can be scanned for students to access via

computer or transcribed into Braille. Anything to be presented in printed form (whiteboard, handouts, journals, textbooks) will need to be adapted. Other technology includes tape recorders, laptop computers with speech or large print output, taped textbooks, raised line paper, large print textbooks and computerised Braille. Because it is impossible to skim Braille, students will need additional time.

The following methods are suggested to reduce the effect of a visual impairment:

- Always identify yourself when addressing a student, they may miss initial information while trying to identify who is speaking.
- Indicate you are addressing them by using their name.
- Avoid changing the physical setting. Students with a visual impairment navigate by memory and touch.
- When a student is finding their way around an unfamiliar setting, give verbal instructions such as turn left, right, one step up, etc.
- Provide physical assistance if necessary.

The barriers faced by students with a visual impairment are both non-verbal communication and physical access. Gifted students with a visual impairment require a programme that accommodates both their talents and their disability. Curriculum adaptations need to incorporate extension or acceleration activities relevant to the students areas of ability.

Case story

Anne

Anne was blind at birth. As a preschooler, she loved to listen to her mother playing the piano. Anne had an "ear for music" and loved to sing and dance. In spite of her disability, Anne became an accomplished pianist. She is able to discriminate sounds and plays "by ear". The encouragement shown by Anne's mother enabled her to succeed when she could just have easily believed mastery was beyond Anne's ability.

Conclusion

Students with a sensory impairment need recognition that their disability will affect school performance, yet does not preclude the existence of special talents. Teachers will need to make adaptations to overcome the disabling effect of the impairment, while focusing on ways to enhance and develop each students special ability. The attitude of the teacher will be enabling or disabling to a student.

Learning disabilities

Students with learning disabilities may also be gifted. These students suffer frustration and poor self-esteem when their gifts are not recognised. Students may have difficulty in a variety of areas, which can effect the development of their talents. Teachers need to recognise the

limitations created by their learning difficulties, find strategies to overcome these, and provide an environment that fosters each student's special ability.

Suter & Wolf (1994) and Silver (1994) discuss a range of difficulties experienced by students with learning disabilities.

- **Input difficulties** may affect visual or auditory perception skills. This causes difficulty distinguishing subtle differences in shape or sound. Students may confuse letters (for example, b:d, p:q) and have difficulty with written work, copying designs, or completing visual motor tasks. Students may confuse verbal input and be unable to distinguish similar sounding words (for example, bell:ball, vine:fine).
- **Integration difficulties** may make sequencing or abstracting of information difficult. A student may hear and understand a story yet not be able to retell it without mixing up the sequence of events. An inability to sequence also affects spelling and reading as letters are not recalled in sequence (for example, was:saw, dog:god). Some students may have difficulty understanding the concepts or abstract ideas behind words or images.
- **Memory difficulties** can affect either short- or long-term memory. This is sometimes related more to either verbal or visual input. Students may attempt to learn spelling words or times tables yet have difficulty retaining the information.
- **Output difficulties** can affect the ability to communicate ideas to others. This could be written or verbal. Oral language requires a student to organise thoughts and find the appropriate words to use. Some students can achieve this during normal conversation yet have difficulty responding to demand language or questions. Motor disabilities can effect a student's ability to produce written work of an acceptable standard.

Chapman & Turner (1995) suggest difficulties that students encounter may be caused by a delay in developing effective learning strategies. This includes cognition (remembering, problem solving, attending) and metacognition (knowing which skills and strategies are needed).

Students who are both gifted and have a learning disability cannot reconcile their higher level thinking ability with their difficulty and frustration over mastering basic academic skills. Students often become self critical, withdrawn, depressed, and angry. They may have poor peer relations, difficulty sustaining attention, difficulty following instructions, and produce work that leaves them feeling inadequate (Suter & Wolf, 1994).

Identification of giftedness may rely on intelligence tests or teacher observations. If a parent has concerns about their child's well-being or unusual behaviours, testing by an Educational Psychologist may provide additional information. Classroom teachers and Resource Teachers in Learning and Behaviour (RTLb) can also identify students with mixed abilities. Some characteristics, discussed by Landrum (1994), may indicate giftedness in students with learning disabilities – these include exceptional skills in oral language, analytical ability, intuition, perception, memory, problem-solving skills, curiosity, or creativity.

Three different categories of learning disabled, gifted students have been outlined by Baum (1994), Landrum (1994), and Suter & Wolf (1994).

- Students identified as gifted may have subtle learning difficulties, which are masked by their abilities. Failure to identify their learning disabilities may result in academic difficulties as their education progresses.
- Students may be unidentified as gifted or learning disabled. Their abilities enable them to maintain an average or even above average performance while learning disabilities prevent them from achieving their full potential.
- Students may be identified as learning disabled while their giftedness remains unidentified. These students may be failing at school as more emphasis is placed on their difficulties with no recognition of their strengths.

Gifted students with learning disabilities require specific support to meet their potential.

Baum (1994) suggests the following should be considered when developing programmes for these students.

- Focus on developing the student's talent. Research indicates remediating areas of weakness without building strengths has an adverse affect on self-esteem.
- Provide enrichment activities that enable the student to succeed. Ensure learning difficulties do not affect achievement and learning outcomes.
- Allow students to generate relationships between past information and new information. Choose material of high interest to the student.
- Provide an environment that is nurturing, inclusive, and respects individual differences. Students need to feel valued and have a sense of belonging.
- Provide options that enable students a variety of methods to learn and express ideas. Consider using videos, lectures, interviews, speeches, plays, collage, photos, word processors, calculators, etc.
- Students can be taught to use brainstorm and webbing techniques to organise their ideas.
- Teachers can assist with organisational skills by providing class timetables, time management plans, and using visual cues around the classroom.

The curriculum needs to provide challenge and interest, while enabling all students to participate.

Case story

Ben

From an early age, Ben's mother felt he was "different" from other children. He continually asked unusual questions and his play was markedly different. While other children were making sand castles, 3-year-old Ben was laying pipes and trying to figure out **why** water

wouldn't flow up the pipe. Ben was a quick problem-solver and had excellent knowledge about topics of interest.

Ben's teacher showed little interest in his ideas and curiosity. When his mother suggested Ben seemed bright, she received a negative response from his teacher. Ben made poor progress and was perceived as failing at school. He was unable to read at the level of other students his age and experienced difficulty with writing and spelling activities. Ben would avoid schoolwork by sitting under his desk and ignoring teacher protests. Ben appeared to be "slow" and unable to master basic school work. His mother stated her feelings at that time, "My son was different and I was worried." An educational assessment completed when Ben was seven indicated he was a student of mixed abilities with skills ranging from the 13th percentile to the 98th percentile. Ben is a gifted student with a learning disability. He experiences frustration with many learning situations and chooses to be confrontational to avoid work he perceives as difficult or boring. Ben needs an educational experience that acknowledges his giftedness while accommodating his disability.

Learning disabilities can severely limit a student's ability to reach their full potential. Identification of giftedness is essential. Each person with a learning disability also has learning strengths. Programming for students with learning disabilities must focus on building their strengths and self esteem. All students can excel, regardless of any learning disability.

Autistic spectrum disorders

Students with autism may be intellectually delayed or gifted. Students categorised as having high functioning autism or Asperger Syndrome (AS) often have special abilities. These abilities may be difficult to nurture because of the disabling aspects of autistic disorders. The difficulties students suffer can dramatically impact on their ability to learn or even function within a school environment. Identification of giftedness is complicated by the traits of AS.

Students with AS may be able to speak clearly yet have considerable difficulty with reciprocal communication and social skills. They may interrupt conversations to talk about their special interest, with no awareness of the listener's focus. Once interrupted, students will often start the dialogue again from the beginning. Students with AS take language very literally and lack the ability to comprehend implied meaning. Everyday comments, idioms, rhetorical questions, and sarcasm cause huge confusion. The student's response may seem cheeky but often indicates a lack of understanding. For example, a student told sternly to "Cut it out" replied, "Cut what out. I don't have any scissors." Misunderstandings may cause considerable distress.

Students with AS frequently have difficulty observing nonverbal language. An inability to read facial expressions means they are unable to identify whether someone is angry or sad, etc. When strong feelings are obvious, even to a student with AS, they lack the ability to empathise or understand another's point of view. Whereas other students will comply with a teacher's nonverbal signs, a student with AS will not comprehend the message. A classroom

can be confusing and frightening for students struggling to understand, what seems like, a foreign language. Teachers having an awareness of the communication difficulties can ensure their instructions are clear and without any ambiguity.

Sensory difficulties can be present in many forms. Students with AS can have an exaggerated response in all five sensors. They may react explosively to gentle touch, because it hurt them. The taste or texture of food can cause them to spit food out unceremoniously and they often have a highly restricted diet. Smells unnoticeable to others may cause loud complaints and nausea. Senses can become confused. Noise causes particular concern in the school environment. Students may not cope with loud, crowded, or confusing places. This may be assemblies, buses, or even the regular classroom. Students may become overwhelmed and unable to cope. This may result in an unexpected outburst or the student shutting down and becoming withdrawn. Having a designated place available for students to use before they become overwhelmed is a useful strategy to prevent problems (Attwood, 2000).

Students with AS need regular routines. Attwood (2000) suggests an unpredictable environment increases stress and anxiety, often resulting in anger and confusion. Ritualistic/repetitive behaviour can escalate as the student attempts to bring some order into their life. Routines become more dominant and elaborate when there have been unexpected changes. To cope effectively, students need preparation for even minor changes.

To function effectively, students with AS require a social skills programme and help adjusting to unexpected changes. Social stories (Gray, 2000) help students learn to cope in various situations by breaking down the social situation into recognisable steps for learning. These steps involve: recognising the social cues (descriptive sentences), understanding what the situation means (perspective sentences), and learning appropriate responses (directive sentences). Social stories are also effective in reducing anxiety and preparing for change.

The following social story (adapted from Jenison, 1993), was written to assist a student who became excessively anxious and had panic attacks each time his class teacher was away.

Having a relief teacher

Sometimes my teacher is away. She may be sick or she may be at a meeting.

When my regular teacher is away, a relief teacher will look after my class.

We will probably line up outside the classroom as usual.

The relief teacher may call the roll. I will try to answer the same as I do for my regular teacher.

I may be a little nervous! My relief teacher will probably be as nice as my regular teacher.

If I don't know what to do, I can put my hand up. The relief teacher will try to help me.

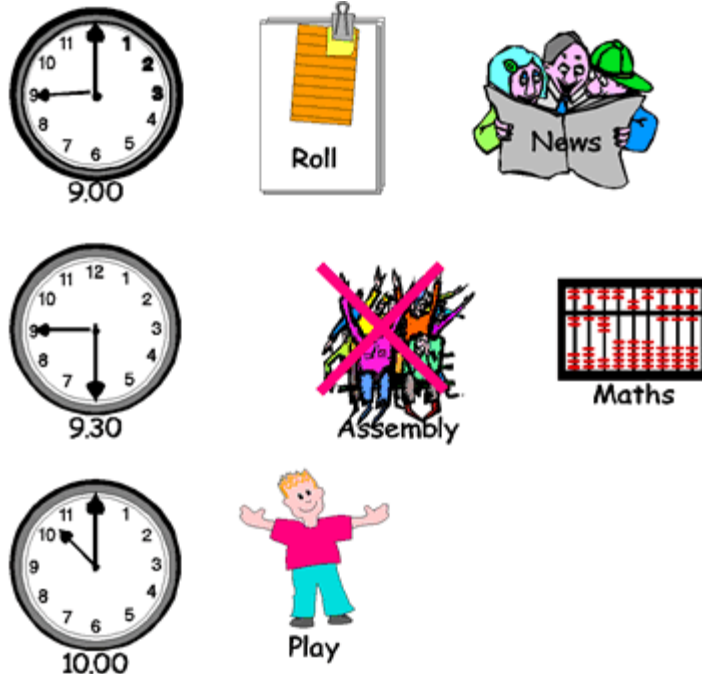
When I have a relief teacher it gives me a chance to learn something from a new person.

A social story explains the situation and gives information for the student to use.

Whereas verbal communication is transitory, visual communication allows the message to remain and be processed (Hodgdon, 2002). The majority of students with AS are visual learners and benefit from visual cues. These can be adapted to give information, remind about rules, and teach self-regulation. They can include timers, charts, calendars, sequencing cards,

photographs, line drawings, diagrams, or symbolic representations, etc. Visual timetables help students adjust to transitions between subjects and activities. Changes can be visually demonstrated to reduce anxiety.

An example of a visual timetable is:



Students with AS develop special interests or fixations, often reciting factual information and technical terms beyond the comprehension of others (Attwood, 2000). The student will display amazing motivation when focusing on their special interest, usually to the exclusion of all else. Incorporating the student's interest into other activities can provide necessary motivation. Grandin (1986, 1995) states childhood obsessions often lead to a lifetime pursuit and may be the beginnings of future career choices.

People with AS are usually very observant and may become absorbed in small details overlooked by others. This can be either an advantage or disadvantage. Chris's class was asked to draw a "bird's eye view" of his classroom. Other students proceeded without difficulty. Chris interpreted the instructions as requiring him to produce a drawing of every item in his class, an accurate view of each book on the bookcase, the correct number of pencils shown in the pencil jar. Chris was paralysed as he took in the details of each individual item in his environment. Other students had finished while Chris was overwhelmed with the task. Chris did not realise other students had a different interpretation and had drawn only a quick sketch of the class layout. Chris perceived himself as "dumb" for being unable to complete the task. His teacher did not understand why he made no effort.

Case story

Chris

Chris found the noise and bustle of the regular classroom overwhelming. He didn't have friends and often withdrew, sitting in a world of his own. He perceived himself as "dumb". After school, Chris would become aggressive and destructive, lashing out at family members to release his frustration. As

Chris was not making academic progress, his teacher suggested he was slow to learn. An educational assessment completed when Chris was aged 7 years identified him as gifted, with a range of abilities and difficulties. A pediatric assessment when Chris was aged 9 resulted in a diagnosis of Asperger's Syndrome. Chris received very little understanding of how his AS affected his ability to cope at school and his gifts were not nurtured. A school production meant his class had regular changes. This included relief teachers, schedule changes and moving to different classes. The school did not recognise the distress this caused him. Chris suffered headaches, stomachaches, nightmares, panic-attacks, and became increasingly compulsive. He began talking of wanting to die. A psychological assessment indicated he was potentially very much at risk. Chris developed a school phobia and was removed from school. He is currently receiving his education through The Correspondence School.

Students with AS have unusual abilities and disabilities. Their social and communicative ineptness make it difficult to form and maintain friendships, they often become isolated at school. Students can suffer disorders such as anxiety, depression, and obsessive-compulsive disorders. Teaching strategies need to focus on overcoming the disabling effects of autism. Capitalising on special interests and gifts can motivate students.

Resources

Resources are needed for both the gifted student and the student with disabilities as both aspects need understanding and addressing. Most resources focus on either giftedness or disability. A range of resources may be necessary to address the needs of each individual student.

Special education facilitators can be contacted through your local Ministry of Education office. They provide information on resourcing and assistance to schools and families.

Books

Attwood, T. (2000). *Aspergers Syndrome; A guide for parents and professionals*. London: Jessica Kingsley Publishers Ltd. Provides an understanding of the difficulties faced by people with Asperger's Syndrome and practical strategies to assist their learning and daily living ability.

Cathcart, R. (1998). *They're not bringing my brain out*. Auckland: Reach Publications.

Cline, S., & Schwartz, D. (1999). *Diverse populations of gifted students*. USA: Prentice Hall. Provides strategies for recognising and teaching gifted students with disabilities.

Davis, G.A., & Rimm, S.B. (1998). *Education of the gifted and talented*. (4th ed). USA: Allyn & Bacon. Chapter 15 (p342-362).

Provides information on identification and programme planning to accommodate students with various disabilities.

Grandin, T. (1995). *Thinking in pictures*. New York: Doubleday.

Temple Grandin reflects on her life experiences and the influence an autistic spectrum disorder has had on her. This book gives a unique insight into the confusion and fear of a child with autism and what made a difference in Temple's life.

Gray, C. (2000). *The new social story book*. Arlington: Future Horizons.

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Websites

TKI takes no responsibility for the content of websites recommended by the author as the Web is very volatile and TKI has no control over outside websites.

Attwood, T.

www.tonyattwood.com

Provides information, links, resources, research, and articles on Asperger Syndrome. This site also includes the transcript of an interview Tony Attwood had with Temple Grandin.

Cloud 9 Childrens Foundation.

www.withyoueverystepoftheway.com

Provides information on Aspergers Syndrome, including a bulletin board to enable parents and teachers to exchange ideas and information.

Deaf Association of New Zealand

www.deaf.co.nz

Do to Learn Group

www.do2learn.com

Provides games for students, and resources and visuals for adults.

Gifted Development Center
www.gifteddevelopment.com

Kelston Deaf Education Centre
www.kdec.co.nz

Learning and Behaviour Charitable Trust NZ
www.lbctnz.co.nz
Provides information and resources for learning and behaviour, in particular for students with ADHD, Asperger Syndrome, and Autism.

Mayer Johnson Inc
www.mayer-johnson.com
Resources for teaching students with disabilities

National Foundation for the Deaf
www.nfd.org.nz

New Zealand Audiological Society
www.audiology.org.nz

O.A.S.I.S. Online Asperger Syndrome Information and Support
www.udel.edu/bkirby/asperger/

Quirk Roberts Publishing
www.UseVisualStrategies.com
Provides information and resources on using visual teaching strategies.

Tools for Coping
www.coping.org
Provides information on adaptive equipment.

Van Ash School for the Deaf
www.vanasch.school.nz

Victoria University
www.vuw.ac.nz/home/publications/disabilities/staffguide/overview.html
Provides information on teaching students with a range of impairments

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